

Cow's milk (dairy) allergy

Key points

- Cow's milk allergy is common in babies and children.
- A cow's milk allergy involves the triggering of the immune system in response to proteins found in cow's milk and other dairy foods. It is very different to [lactose intolerance](#).
- Symptoms of a cow's milk allergy can range from mild to severe (anaphylaxis).
- Avoiding cow's milk and other dairy-containing foods is the only effective way to manage a cow's milk allergy.
- It is important to seek specialist advice on how to remove cow's milk and other dairy foods from the diet and what foods make suitable substitutes.
- Most children will outgrow their cow's milk allergy within the first few years of life.

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An allergy to cow's milk is common in babies and young children. In Australia, around 1 in 50 babies and young children will show signs of an allergy to cow's milk. The good news is that most children will outgrow their cow's milk allergy by the age of 3 to 5 years.

A cow's milk allergy occurs when the body's immune system has an abnormal response to proteins found in dairy. This results in the production of immunoglobulin E (IgE) antibodies to dairy protein. When exposed to dairy protein, these IgE antibodies can signal the immune system to release histamine and other chemicals, causing a range of allergic signs and symptoms.

Cow's milk is the most common dairy allergy trigger. But it is also possible for people with a cow's milk allergy to also react to sheep, goat and buffalo milk. Exposure to even a tiny amount of milk protein can be

enough to trigger an allergic reaction.

Signs and symptoms

There are many signs and symptoms of a cow's milk allergy. They can range from mild to severe. Mild symptoms can include:

- hives
- swelling of the lips, eyes or face
- vomiting and digestive problems.

Severe reactions (anaphylaxis) can include any one of the following symptoms:

- wheezing or coughing
- noisy breathing
- hoarse voice or difficulty talking
- swollen tongue
- swollen or tight throat
- pale and floppy (children)
- dizziness or collapse.

Cow's milk symptoms can occur a few minutes to a few hours after a person consumes cow's milk or dairy containing products.

How a cow's milk allergy is treated

Avoiding cow's milk and dairy-containing products is the only effective treatment for a dairy allergy, unless otherwise advised by a doctor.

Avoiding dairy products involves much more than cutting out cow's milk. Many foods contain traces of dairy proteins. Baked goods, cereals, chocolate, sweets, sausages, salad dressing and even bread can contain traces of milk proteins. Other products such as specialty toothpastes can also contain cow's milk protein. That means it is important to read all ingredient labels and exclude any food and products which contains dairy proteins.

Food ingredients that can indicate the presence of dairy include:

- butter
- buttermilk
- cream
- curd
- ghee
- cheese
- milk solids
- whey

- yoghurt
- casein.

As many children outgrow their cow's milk allergy, these foods *may* be able to be added back into the diet if indicated by the medical specialist. People who do not outgrow the allergy will need to continue to avoid cow's milk and dairy products.



When cow's milk allergy is suspected or confirmed, the exclusion and reintroduction of cow's milk and other dairy foods should only be under the instruction of a medical specialist, and may be guided by a dietitian. If the long-term exclusion of cow's milk and dairy foods is needed, a dietitian can suggest alternative sources of calcium and protein to ensure adequate nutrition and growth.

Milk alternatives for infants

Breastfeeding is recommended for at least 6 months, and for as long desired after this. For some breastfeeding mothers, cow's milk proteins can pass into the breast milk, which may trigger a reaction in the infant. This could mean that the mother may need to exclude cow's milk and dairy products from her diet too. This should only be done under the guidance of a medical specialist.

When breastfeeding is not possible, soy-based formulas may be appropriate for cow's milk allergic children over the age of 6 months. For children over the age of 12 months, soy milk is the preferred alternative as it is the closest nutritionally to cow's milk.

For some infants with a cow's milk allergy, the use of an extensively hydrolysed formula (EHF) may be appropriate. These formulas are based on cow's milk but use enzymes to break down the milk proteins so they are not recognised by the immune system. A rice-protein based formula may also be an appropriate alternative to soy formula and EHF.

If a child has had an anaphylaxis to dairy or reacts to EHF, the doctor may prescribe an amino acid based formula.

Cow's milk allergy versus lactose intolerance

A true cow's milk allergy is very different to lactose intolerance. Unlike an allergy, lactose intolerance doesn't involve the immune system.

Lactose is the main carbohydrate sugar found in dairy products. Symptoms of lactose intolerance include diarrhoea, vomiting, stomach pain and gas.

Lactose intolerance can occur in people that do not produce enough of the enzyme lactase. Lactase is needed to digest lactose. A decline in lactase production after weaning and into adulthood explains most cases of lactose intolerance.

Those with lactose intolerance can usually tolerate small amounts of dairy products. Those with a cow's milk allergy must avoid all forms of dairy-containing products.

Learn more about [lactose intolerance](#).

When to see a dietitian

A diet that must eliminate dairy foods needs to be well planned to meet you or your child's nutritional needs. An Accredited Practising Dietitian (APD) can help you or your child meet your individual needs.

We recommend seeing a dietitian if you (or your baby):

- have an allergy to cow's milk and need some support on the dietary management of this condition
- need nutritional advice to help ensure you or your baby are meeting your individual nutrient requirements
- need advice on what foods can contain dairy proteins
- have questions on how to transition your baby from breastfeeding to a non-dairy diet
- would like personalised advice and support from a professional.

Accredited Practising Dietitians (APDs) are university-trained nutrition experts. They can help you with personalised, easy-to-follow and evidence-based advice.

APDs are Australia's most trusted dietetics professionals.

[Find a dietitian](#)

Top tips

- Any suspected allergy to dairy should be confirmed by your doctor.
- The only effective treatment for a dairy allergy is complete avoidance.
- Soy milk can be a good replacement for cow's milk. Learn more about [plant-based milks](#).

This health advice page was peer-reviewed by an Accredited Practising Dietitian (APD) in March 2022.